New and Changed Information

This chapter provides release-specific information for each new and changed feature in the *Cisco Nexus 7000 Series NX-OS System Management Configuration Guide, Release 6.x*.

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Your software release might not support all the features in this document. For the latest caveats and feature information, see the Bug Search Tool at https://tools.cisco.com/bugsearch/ and the release notes for your software release.

Feature	Description	Changed in Release	Where Documented
PTP	PTP does not support M3 module.	7.3(0)DX(1)	Chapter 5, “Configuring PTP”
Online diagnostics (GOLD)	Added support for M3 module.	7.3(0)DX(1)	Chapter 14, “Configuring Online Diagnostics”
SPAN	Added support for M3 module.	7.3(0)DX(1)	Chapter 17, “Configuring SPAN”
ERSPAN	Added support for M3 module.	7.3(0)DX(1)	Chapter 18, “Configuring ERSPAN”
NetFlow	Added support for M3 module.	7.3(0)DX(1)	Chapter 20, "Configuring NetFlow"
Netflow on CoPP Interface Support	Added Netflow on CoPP Interface Support feature.	7.3(0)D1(1)	Chapter 5, “Configuring PTP”
4K VLANs per SPAN Session	Added support for 4K VLANs per SPAN Session.	7.3(0)D1(1)	Chapter 17, “Configuring SPAN”
4K VLANs per ERSPAN Session	Added support for 4K VLANs per ERSPAN Session.	7.3(0)D1(1)	Chapter 18, “Configuring ERSPAN”

Feature	Description	Changed in Release	Where Documented
NTP Authentication Key Length Enhancement	Increased the length of NTP authentication keys from 15 to 32 alphanumeric characters.	7.3(0)D1(1)	Chapter 4, "Configuring NTP"
Configuring GIR	Starting with Cisco NX-OS Release 7.3(0)D1(1), the default mode for GIR is “isolate”. Provides support for Unplanned Maintenance, Maintenance Mode timer, Suppress FIB Pending, AddingShow commands to snapshots and dumping snapshot sections.	7.3(0)D1(1)	Chapter 22, "Configuring GIR (Cisco NX-OS Release 7.3(0)D1(1))"
Egress NetFlow Support on F3 Modules	Egress NetFlow is supported on F3 modules.	7.2(0)D1(1)	Chapter 20, "Configuring NetFlow"
NetFlow Support on F2, F2e, F3 Sub-interfaces	NetFlow is supported on F2, F2e and F3 sub-interfaces.	7.2(0)D1(1)	Chapter 20, "Configuring NetFlow"
EEM action and scheduling statements	Actions based programmability to program EEM applet with conditional statements, string and arithmetic operations.	7.2(0)D1(1)	Chapter 15, "Configuring the Embedded Event Manager"
NetFlow	Enhanced the F3 Series module packet processing rate to 50000 pps.	7.2(0)D1(1)	Chapter 20, “Configuring NetFlow”
Online diagnostics (GOLD)	Added support for online diagnostics.	7.2(0)D1(1)	Chapter 14, “Configuring Online Diagnostics”
System message logging	Added the ability to add the description for physical Ethernet interfaces and subinterfaces in the system message log.	7.2(0)D1(1)	Chapter 7, “Configuring System Message Logging”
Isolate and Maintenance Mode Enhancement	Provides the ability to gracefully eject a switch and isolate it from the network so that debugging or an upgrade can be performed. The switch is removed from the regular switching path and put into a maintenance mode. Once maintenance on the switch is complete, you can bring the switch into full operational mode.	7.2(0)D1(1)	Chapter 23, “Configuring Maintenance Mode”
SPAN	Added support to remove FabricPath and VLAN tag headers from SPAN packets.	6.2(10)	Chapter 17, “Configuring SPAN”

Feature	Description	Changed in Release	Where Documented
Online diagnostics (GOLD)	• Added the InternalPortLoopback test as a nondisruptive health monitoring test. • Added support for the N77-F348XP-23 module for the PortLoopback test.	6.2(10)	Chapter 14, “Configuring Online Diagnostics”
Support for CISCO-BGP-MIBv2	Added the **cbgp2** keyword to the **snmp-server enable traps** command.	6.2(8)	Chapter 12, “Configuring SNMP”
Online diagnostics (GOLD)	Added ability to configure recovery actions for certain runtime diagnostic tests.	6.2(8)	Chapter 14, “Configuring Online Diagnostics”
ERSPAN	Added support for ERSPAN destination sessions on F2 and F2e Series modules.	6.2(2)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added NAM support for ERSPAN data sources.	6.2(2)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for extended ERSPAN.	6.2(2)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for rule-based ERSPAN.	6.2(2)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for exception ERSPAN	6.2(2)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for ERSPAN termination on F2 or F2e Series modules.	6.2(2)	Chapter 18, “Configuring ERSPAN”
NetFlow	Added support for ingress NetFlow sampling and DHCP relay to be configured on the same interface.	6.2(2)	Chapter 20, “Configuring NetFlow”
NetFlow	Added NAM support for NetFlow data sources.	6.2(2)	Chapter 20, “Configuring NetFlow”
NetFlow	Added support for full NetFlow and sampled NetFlow on the Cisco NetFlow Generation Appliance (NGA).	6.2(2)	Chapter 20, “Configuring NetFlow”
NTP	Introduced the **ntp access-group match-all** command to cause the access group options to be scanned in order, from least restrictive to most restrictive.	6.2(2)	Chapter 4, “Configuring NTP”

Feature	Description	Changed in Release	Where Documented
NTP	Introduced the **no ntp passive** command to prevent NTP from forming associations.	6.2(2)	Chapter 4, “Configuring NTP”
NTP	Added the ability to configure NTP broadcast and multicast servers and multicast clients on an interface.	6.2(2)	Chapter 4, “Configuring NTP”
NTP	Added the ability to enable or disable NTP on an interface.	6.2(2)	Chapter 4, “Configuring NTP”
NTP	NTP access group options are now scanned in order from least restrictive to most restrictive.	6.2(2)	Chapter 4, “Configuring NTP”
SNMP	Added support for AAA exclusive behavior in SNMPv3 servers to authenticate users based on location.	6.2(2)	Chapter 12, “Configuring SNMP”
SNMP	Added the ability to apply both IPv4 and IPv6 ACLs to the same SNMPv3 user or SNMPv3 community.	6.2(2)	Chapter 12, “Configuring SNMP”
SPAN	Added NAM support for SPAN data sources.	6.2(2)	Chapter 17, “Configuring SPAN”
SPAN	Added support for FEX ports as a SPAN source in Tx direction only on F2e Series modules.	6.2(2)	Chapter 17, “Configuring SPAN”
SPAN	Added support for extended SPAN	6.2(2)	Chapter 17, “Configuring SPAN”
SPAN	Added support for rule-based SPAN	6.2(2)	Chapter 17, “Configuring SPAN”
SPAN	Added support for exception SPAN.	6.2(2)	Chapter 17, “Configuring SPAN”
XMLIN	Introduced the XMLIN tool to enable you to convert CLI commands to the Network Configuration (NETCONF) protocol.	6.2(2)	Chapter 25, “Converting CLI Commands to Network Configuration Format”
EEE	Added support for EEE on F2e Series modules.	6.2(2)	Chapter 21, “Configuring EEE”
ERSPAN	Added support for ERSPAN on F2e Series modules.	6.2(2)	Chapter 18, “Configuring ERSPAN”

Feature	Description	Changed in Release	Where Documented
NetFlow	Added support for sampled NetFlow on F2 Series and F2e Series modules.	6.2(2)	Chapter 20, “Configuring NetFlow”
NetFlow	Added the **flow timeout seconds** command for F2 Series and F2e Series modules.	6.2(2)	Chapter 20, “Configuring NetFlow”
ERSPAN	Added support for ERSPAN Type III.	6.1(1)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for Supervisor 2	6.1(1)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for F2 and M2 Series modules.	6.1(1)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added support for ERSPAN sampling	6.1(1)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added the ability to configure MTU truncation and the source rate limit for each ERSPAN session.	6.1(1)	Chapter 18, “Configuring ERSPAN”
NTP	Increased the length of NTP authentication keys from 8 to 15 alphanumeric characters.	6.1(1)	Chapter 4, “Configuring NTP”
Online diagnostics (GOLD)	Added support for Supervisor 2 and M2 Series modules.	6.1(1)	Chapter 14, “Configuring Online Diagnostics”
Online diagnostics (GOLD)	Added support for F2 Series modules for the Spine path, RewriteEngineLoopback and SnakeLoopback test and the Spine path tests	6.1(1)	Chapter 14, “Configuring Online Diagnostics”
Online diagnostics (GOLD)	Added support for configuring online diagnostics in the admin VDC.	6.1(1)	Chapter 14, “Configuring Online Diagnostics”
PTP	Added PTP support in Layer 3 mode for F2, F2e, and M2 Series modules.	6.1(1)	Chapter 5, “Configuring PTP”
PTP	Added support for M2 Series modules.	6.1(1)	Chapter 5, “Configuring PTP”
PTP	Changed the PTP MAC format from FF:FF to FF:FE.	6.1(1)	Chapter 5, “Configuring PTP”
PTP	Deprecated the **vrf** option from the **ptp source** command.	6.1(1)	Chapter 5, “Configuring PTP”

Feature	Description	Changed in Release	Where Documented
SPAN	SPAN Added support for SPAN sampling.	6.1(1)	Chapter 17, “Configuring SPAN”
SPAN	Allowed the inband interface to be added as a source from any VDC except the admin VDC.	6.1(1)	Chapter 17, “Configuring SPAN”
SPAN	Added support for Supervisor 2.	6.1(1)	Chapter 17, “Configuring SPAN”
SPAN	Added support for M2 Series modules.	6.1(1)	Chapter 17, “Configuring SPAN”
SPAN	Added FCoE SPAN support on F2 Series modules for storage VDCs.	6.1(1)	Chapter 17, “Configuring SPAN”
ERSPAN	ERSPAN and ERSPAN ACLs are not supported on F2 Series modules.	6.0(1)	Chapter 18, “Configuring ERSPAN”
NetFlow	NetFlow is not supported on F2 Series modules.	6.0(1)	Chapter 19, “Configuring NetFlow”
NetFlow	Added support for the collect routing forwarding-status command to trigger the collection of flows denied by ACL entries.	6.0(1)	Chapter 20, “Configuring NetFlow”
Online diagnostics (GOLD)	Added PTP support on port-channel member ports.	6.0(1)	Chapter 14, “Configuring Online Diagnostics”
PTP	Added support for F2 Series modules.	6.0(1)	Chapter 5, “Configuring PTP”
PTP	Added PTP support on port-channel member ports.	6.0(1)	Chapter 5, “Configuring PTP”
SPAN	Added support for F2 Series modules.	6.0(1)	Chapter 17, “Configuring SPAN”
NTP	Added support for F2 Series modules.		Chapter 4, “Configuring NTP”
CFS protocol	Added CFS over Fibre Channel (CFSoFC) distribution support for device alias, DPVM, FC domain, FC port security, FC timer, IVR, and RSCN.	5.2(3)	Chapter 3, “Configuring CFS”
EEM event correlation	Added support for multiple event triggers in a single EEM policy.	5.2(1)	Chapter 21, “Configuring EEE”

Feature	Description	Changed in Release	Where Documented
ERSPAN	Added ERSPAN source support for Cisco Nexus 2000 Series Fabric Extender interfaces.	5.2(1)	Chapter 18, “Configuring ERSPAN”
ERSPAN	Added the ability to configure the multicast best effort mode for an ERSPAN session.	5.2(1)	Chapter 18, “Configuring ERSPAN”
HTTP proxy server for Smart Call Home	Added the ability to send HTTP messages through an HTTP proxy server.	5.2(1)	Chapter 8, “Configuring Smart Call Home”
LLDP	Added LLDP support for the Cisco Nexus 2000 Series Fabric Extender.	5.2(1)	Chapter 19, “Configuring LLDP”
NetFlow	Added NetFlow support on switch virtual interfaces (SVIs) for F1 Series ports.	5.2(1)	Chapter 20, “Configuring NetFlow”
NTP	Added NTP support for all VDCs, enabling them to act as time servers.	5.2(1)	Chapter 4, “Configuring NTP”
NTP	Added the ability to configure the device as an authoritative NTP server, enabling it to distribute time even when it is not synchronized to an existing time server.	5.2(1)	Chapter 4, “Configuring NTP”
NTP	Changed the command to enable or disable NTP from [no] ntp enable to [no] feature ntp.	5.2(1)	Chapter 4, “Configuring NTP”
NTP access groups	Added the serve, serve-only, and query-only access group options to control access to additional NTP services.	5.2(1)	Chapter 4, “Configuring NTP”
Online diagnostics (GOLD)	Added the serve, serve-only, and query-only access group options to control access to additional NTP services.	5.2(1)	Chapter 14, “Configuring Online Diagnostics”
Online diagnostics (GOLD)	Enabled the SpineControlBus test on the standby supervisor.	5.2(1)	Chapter 14, “Configuring Online Diagnostics”
Online diagnostics (GOLD)	Deprecated the SnakeLoopback test on F1 Series modules.	5.2(1)	Chapter 14, “Configuring Online Diagnostics”
PTP	Added support for the Precision Time Protocol (PTP).	5.2(1)	Chapter 5, “Configuring PTP”

Feature	Description	Changed in Release	Where Documented
SPAN	Added SPAN source support for Cisco Nexus 2000 Series Fabric Extender interfaces.	5.2(1)	Chapter 17, “Configuring SPAN”
SPAN	Added the ability to configure MTU truncation, the source rate limit, and the multicast best effort mode for each SPAN session.	5.2(1)	Chapter 17, “Configuring SPAN”
System message logging	Added the ability to add the description for physical Ethernet interfaces and subinterfaces in the system message log.	5.2(1)	Chapter 7, “Configuring System Message Logging”
Online diagnostics (GOLD)	Added support for the SnakeLoopback test on F1 Series modules.	5.1(2)	Chapter 14, “Configuring Online Diagnostics”
Bridged NetFlow	Added support for VLAN configuration mode, which enables you to configure VLANs independently of their creation, when configuring bridged NetFlow on a VLAN.	5.1(1)	Chapter 20, “Configuring NetFlow”
DCBXP	This link layer protocol is used to announce, exchange, and negotiate node parameters between peers.	5.1(1)	Chapter 19, “Configuring LLDP”
ERSPAN and ERSPAN ACLs	You can configure ERSPAN to monitor traffic across the IP network.	5.1(1)	Chapter 18, “Configuring ERSPAN”
Online diagnostics (GOLD)	Added support for FIPS and BootupPortLoopback tests.	5.1(1)	Chapter 14, “Configuring Online Diagnostics”
RMON	Enabled RMON by default.	5.1(1)	Chapter 17, “Configuring SPAN”
SPAN	Added support for F1 Series modules and increased the number of supported SPAN sessions from 18 to 48.	5.1(1)	Chapter 17, “Configuring SPAN”
Syslog as EEM publisher	You can monitor syslog messages from the switch.	5.1(1)	Chapter 21, “Configuring EEE”
Syslog servers	Increased the number of supported syslog servers from three to eight.	5.1(1)	Chapter 7, “Configuring System Message Logging”
SMTP server configuration for Smart Call Home	You can configure multiple SMTP servers for Smart Call Home.	5.0(2)	Chapter 8, “Configuring Smart Call Home”

Feature	Description	Changed in Release	Where Documented
VRF support for HTTP transport of Smart Call Home messages	VRFs can be used to send e-mail and other Smart Call Home messages over HTTP.	5.0(2)	Chapter 8, “Configuring Smart Call Home”
Smart Call Home crash notifications	Messages are sent for process crashes on line cards (as well as supervisor modules).	5.0(2)	Chapter 8, “Configuring Smart Call Home”
EEM system policies	Fan EEM policies are modified for the Cisco Nexus 7000 10-Slot Switch.	5.0(2)	Appendix B, “Embedded Event Manager System Events and Configuration Examples”
LLDP	You can configure the Link Layer Discovery Protocol (LLDP) in order to discover other devices on the local network.	5.0(2)	Chapter 19, “Configuring LLDP”
NetFlow	You can specify the NetFlow instance for which you want to display NetFlow IPv4 flows and NetFlow table utilization.	5.0(2)	Chapter 20, “Configuring NetFlow”
NTP access groups	You can control access to NTP services by using access groups.	5.0(2)	Chapter 4, “Configuring NTP”
NTP authentication	You can configure the device to authenticate the time sources to which the local clock is synchronized.	5.0(2)	Chapter 4, “Configuring NTP”
NTP logging	You can configure NTP logging in order to generate system logs with significant NTP events.	5.0(2)	Chapter 4, “Configuring NTP”
NTP server configuration	Added the optional key keyword to the ntp server command to configure a key to be used while communicating with the NTP server.	5.0(2)	Chapter 4, “Configuring NTP”
SNMP notifications	Updated the snmp-server enable traps commands.	5.0(2)	Chapter 12, “Configuring SNMP”

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